

# Work Order ID 73802

Thursday, September 15, 2011 12:34:38 PM

Page 1

Item ID: D3439-3

Accept

Revision ID:

Item Name: Stud

Start Date: 9/15/2011 Start Qty: 40.00

Required Date: 9/23/2011 Req'd Qty: 40.00

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3439

B

100

0.00



Hardinge

Hardinge CNC Lathe Small

Memo

TURN AS PER FOLIO FA959

FOLIO REV: *At*

DWG REV: \_\_\_\_\_

DEBURR

0.00

40  $\phi$  *OK* 11/10/17

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Quality Control

Memo

0.00

40  $\phi$  *OK* 11/10/17

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D3439-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Stud

Start Date: 9/15/2011 Start Qty: 40.00



Cust Item ID:

Required Date: 9/23/2011 Req'd Qty: 40.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC8- Inspect parts - second check

0.00

2L 11-10-17

QC

Memo

0.00

Quality Control

130

Identify as per dwg & Stock Location: ~~ST~~ <sup>GA</sup> 0.00

Packaging

Memo

0.00

Packaging

(HOK)

SP 11-10-13

140

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

11/10/18  
ME  
11-10-18

**Dart Aerospace Ltd**

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**NOTE:** Date & initial all entries

# Picklist Print

Thursday, September 15, 2011 12:34:35 PM

Page 1

Work Order ID: 73802

Parent Item: D3439-3

Parent Item Name: Stud





Start Date: 9/15/2011

Required Date: 9/23/2011

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP Rev:A 10.09.08 new issue verf:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.500  303 Round Bar 0.500"		Purchased	No			100	f	35.9300	0.113 	4.757895		<i>avg / 11/10/17</i>	

Location

Loc Qty

Loc Code

MAT028

35.93

117143

11.34

118271

11.9

118509

12.69

~~317009~~

4.500'

**Dart Aerospace Ltd**

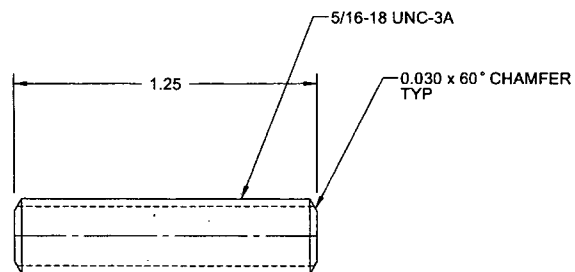
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
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**NOTE:** Date & initial all entries





**D3439-3 STUD**

**NOTES:**

- 1) MATERIAL: AISI 303 STAINLESS STEEL ROUND BAR PER ASTM A582  
REF DART SPEC M303R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs

*W.D. 73802*

**RELEASED**  
2010-09-07  
*MP*

DESIGN	<i>g</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>g</i>	DRAWING NO.	REV. B
CHECKED	<i>g</i>	D3439	SHEET 2 OF 2
MFG. APPR.	<i>g</i>	TITLE	SCALE
APPROVED	<i>g</i>	MIRROR ASSEMBLY	NTS
DE APPR.	<i>g</i>	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
DATE	10.07.20	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



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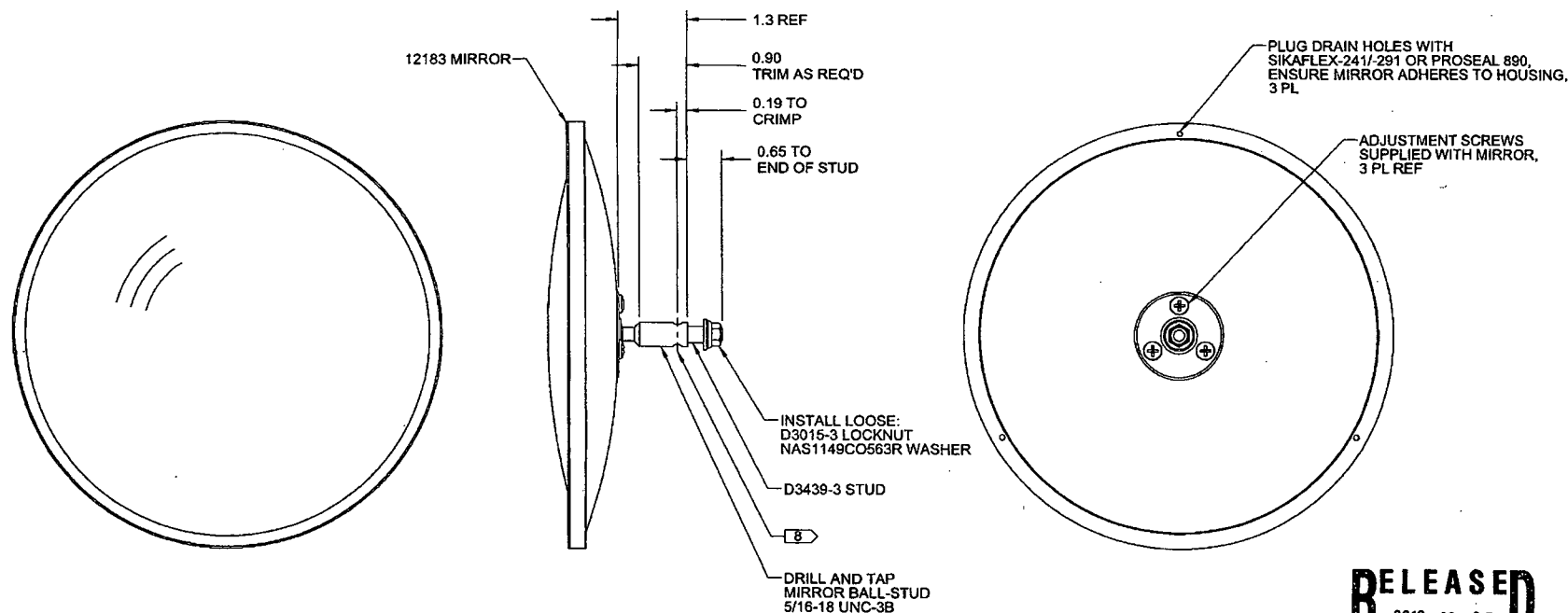
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ITEM	QTY	P/N	DESCRIPTION
1	X	D3439-101	MIRROR ASSEMBLY, 8"
2	1	12183	MIRROR 8" (GROTE)
3	1	D3015-3	LOCKNUT
4	1	D3439-3	STUD
5	1	NAS1149CO563R	WASHER (OR AN960JD516)



### D3439-101 MIRROR ASSEMBLY

**RELEASED**  
2010-09-07

#### NOTES:

- 1) MATERIAL: MIRROR= 8" ROUND CONVEX MIRROR W/ STAINLESS STEEL CASE  
CENTER-MOUNT BALL-STUD W/ 1/4-20 X 1" DEEP FEMALE THREAD  
GROTE INDUSTRIES, 2600 LANIER DRIVE, MADISON, INDIANA 47250
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3439-101" USING REMOVEABLE TAG
- 7) WEIGHT: 1.18 lbs
- 8) TO INSTALL D3439-3 STUD:
  - APPLY LOCKTITE 262 TO THREADS BEING INSTALLED INTO MIRROR BALL-STUD
  - THREAD D3439-3 STUD INTO MIRROR BALL-STUD
  - CRIMP MIRROR BALL-STUD ON OPPOSING SIDES, 0.19 FROM END AS ILLUSTRATED USING TOOL DT8317
  - CRIMP TO DEPTH OF 0.015-0.030 USING R0.125

B	REDRAW, ADD -3 (WAS PURCHASED/TRIMMED BOLT), RMV LPS	CP	10.07.20
A	NEW ISSUE	CP	05.05.27
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.07.20		

<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. <b>D3439</b>	REV. B SHEET 1 OF 2
TITLE <b>MIRROR ASSEMBLY</b>	SCALE NTS
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